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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,601	06/23/2003	Roland K. Sevilla	100176X219814	1503
29050	7590	02/16/2006	EXAMINER	
STEVEN WESEMAN ASSOCIATE GENERAL COUNSEL, I.P. CABOT MICROELECTRONICS CORPORATION 870 NORTH COMMONS DRIVE AURORA, IL 60504			RACHUBA, MAURINA T	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,601

Applicant(s)

SEVILLA, ROLAND K.

Examiner

M Rachuba

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/23/03, 7/18/03, 10/18/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claim 11 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01 December 2005.
2. Applicant's election with traverse of species 1 in the reply filed on 01 December 2005 is acknowledged. The traversal is on the ground(s) that the species represent different groove patterns, with and without secondary channels and share a common stated relationship of primary and secondary sets of grooves that are interconnected and non-aligned. This is not found persuasive because applicant has disclosed that there are embodiments with secondary channels, and without secondary channels (for example, the species of figure 1a shows the non-aligned top and bottom grooves, the intersection of the grooves forming primary channels, but it is in another species that the secondary channels are disclosed. That the species have some structure in common is moot, applicant has disclosed several different species, of many different combinations of structures, and has not elected a species that contains all the various structures.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3723

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 7-10, 12-13, 15 and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by WO 02/02279 A2, cited in the IDS filed 18 October 2005. Please refer to figures 8-9 and page 14.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/02279 A2. '279 does not explicitly disclose a specific void volume, or a specific average groove width of the first, or second, or combination of first and second grooves. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided '279 with the desired number and size of grooves, depending on the desired void volume and groove width, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Here, '279, pages 13-15, discusses varying the groove density (number of grooves) to achieve a desired polishing uniformity and pad flexibility. The larger the void volume, and the width of the grooves, the more flexible the polishing pad.

Art Unit: 3723

7. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/02279 A2 in view of Wadensweiler et al, US006841057B2. '279 does not disclose that the polishing pad comprises abrasive, or that the polishing pad is conductive, comprising conductive elements or a conductive polymer. '057, teaches that it is known to make polishing pads abrasive, that when used with a polishing medium, facilitates material removal from the substrate. It would have been obvious to one of ordinary skill in the art to have provided '279 with the abrasive taught by '057, column 17, lines 44-60, to facilitate material removal from the substrate. '057 also teaches that it is old and well known to make a polishing pad conductive, using conductive elements or a conductive polymer. It would have been obvious to one of ordinary skill to have made '279 conductive, through use of conductive elements or conductive polymer, as taught by '057, column 6, lines 60 through column 8, lines 37, to allow the pad to be used in electro-chemical-mechanical polishing of the substrate, to remove material that are difficult to remove through chemical-mechanical polishing, see column 1, lines 35 column 2, lines 15.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similar polishing pads are cited of interest.

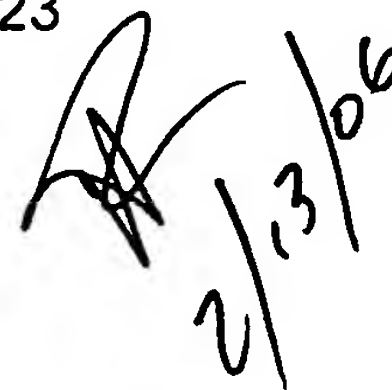
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

Art Unit: 3723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba
Primary Examiner
Art Unit 3723

Handwritten signature of M. Rachuba and the date 2/13/06.